

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012552**Date Inspected:** 16-Feb-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Du Zhi Qun**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector observed the following work in progress:

BAY 10

Repair Welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 057258, Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 4 B/C corner joint. The weld identified as NSTL4-3B/L-5B. ZPMC QC Identified as Du Zhi Quin, with Temporary welding repair report. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-2G (2F) - Repair.

This QA Inspector observed ZPMC qualified welding personnel identified as 066733, Perform Flux Core Arc Welding (FCAW) on South tower lift 4 Fit Lug. The weld identified as SSTL4-1K/L-93, near double diaphragm 143M top. ZPMC CWI Identified as Liu Zhong An, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 053116, Perform Flux Core Arc Welding (FCAW) on South tower lift 4 Fit Lug. The weld identified as SSTL4-1H/L-24, near double diaphragm 131M bottom. ZPMC QC Identified as Sun Tian Liang, The welding parameters as measured using QC's

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calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F. For more information see attached photo.

This QA Inspector observed ZPMC qualified welding personnel identified as 068047, Perform Flux Core Arc Welding (FCAW) on South tower lift 4 Fit Lug. The weld identified as SSTL4-1G/L-95, near double diaphragm 127M top. ZPMC CWI identified as Gang Liang Zhu, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 068047, Perform Flux Core Arc Welding (FCAW) on South tower lift 4 Fit Lug. The weld identified as SSTL4-1G/L-26, near double diaphragm 127M bottom. ZPMC CWI identified as Gang Liang Zhu, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 068047, Perform Flux Core Arc Welding (FCAW) on South tower lift 4 Fit Lug. The weld identified as SSTL4-1G/L-97, near double diaphragm 127M top. ZPMC CWI identified as Gang Liang Zhu, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 068047, Perform Flux Core Arc Welding (FCAW) on South tower lift 4 Fit Lug. The weld identified as SSTL4-1F/L-97, near double diaphragm 123M top. ZPMC CWI identified as Gang Liang Zhu, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

### BAY 11:

This QA Inspector observed ZPMC qualified welding personnel identified as 042195. Perform Submerged Arc Welding (SAW) on Angle connection Plate. Joint identified ED1-SA4-68-135M-6-1B, ED1-SA4-68-135M-5-1B, ED1-SA4-68-135M-4-1B, ZPMC QC Identified as Mao Bin Bin. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3221-Tc-U5-S-1.

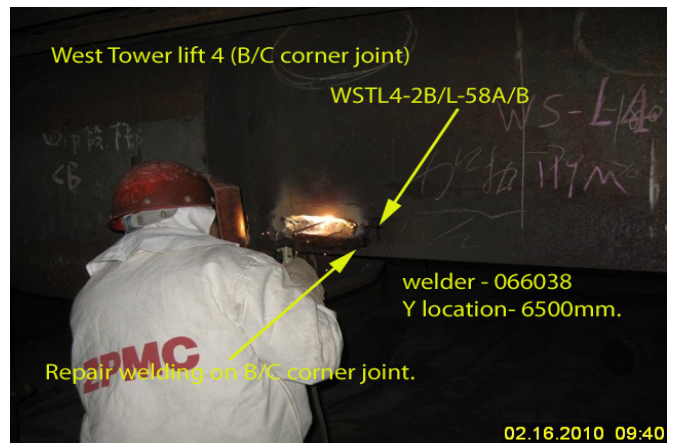
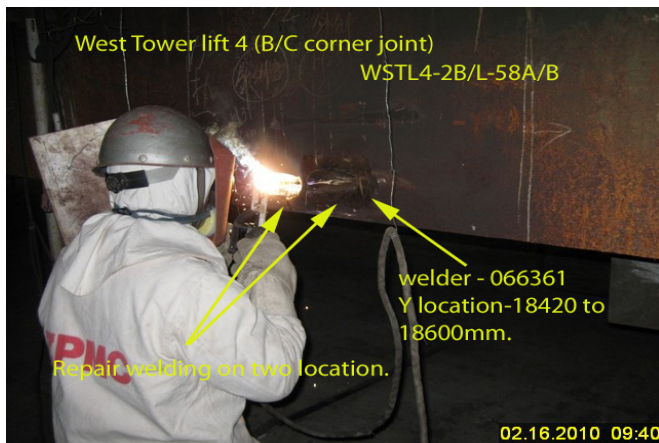
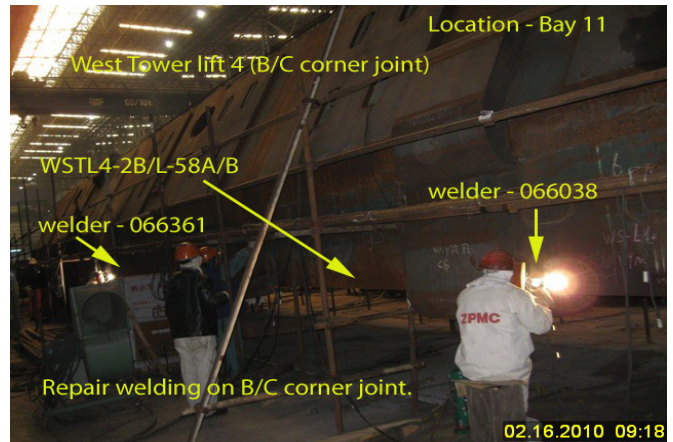
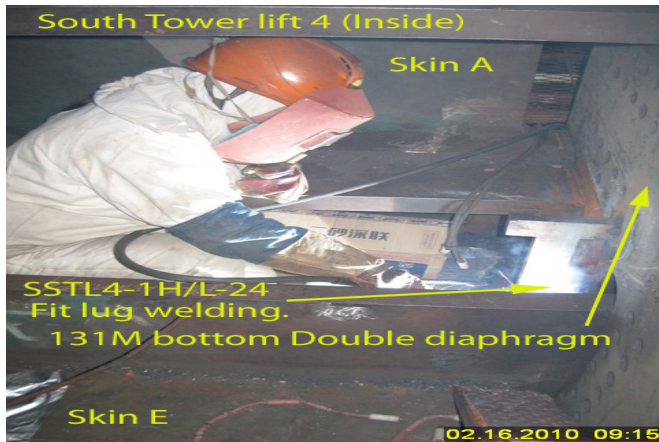
### Repair Welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 066361, 066038, Perform Shielded Metal Arc Welding (SMAW) on 3rd time repair of West Tower lift 4 B/C corner joint. The weld identified as WSTL4-2B/L-58A/B. ZPMC CWI Identified as Lilin, with Critical welding repair report, CWR-T-CWR569, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-2G (2F) – Repair-1. For more information see attached photos.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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## Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest phone: 15000422360, who represents the Office of Structural Materials for your project.

**Inspected By:** Gaikwad,Shailesh

Quality Assurance Inspector

**Reviewed By:** Clifford,William

QA Reviewer